

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Anil M. MURCHING et al

Application No: 09/318,682

Filed: May 25, 1999

For: KALMAN TRACKING OF COLOR OBJECTS

Art Unit: 2621

Examiner:
Sheela C. Chawan

#4/A
K3
7-10-02

REPLY TO THE OFFICE ACTION MAILED 12/19/2001

Assistant Commissioner for Patents
Washington, D.C. 20231

RECEIVED

JUL 03 2002

Technology Center 2600

Sir:

Further examination and consideration of this application are requested in view of the following Amendments and Remarks.

AMENDMENTS

In the Claims:

Add new claims as follows:

4. (New) A method of tracking a colored object moving relative to a background within a sequence of video image frames, comprising:

(a) in an initial frame of the sequence, separating objects from the background based on color,

(b) selecting a separated object by identifying a reference point within a boundary of the object, and

(c) tracking the selected object through successive frames of the video image sequence using a Kalman predictive algorithm.

5. (New) A method according to claim 4, wherein step (c) includes determining the position of a centroid of the selected object and applying the Kalman predictive algorithm to the centroid.

6. (New) A method according to claim 4, wherein step (c) includes determining the position of a centroid based on a color function of the selected object and applying the Kalman predictive algorithm to the centroid.